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ABSTRACT

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The invention relates to novel compositions comprising genetically engineered cells and one or more polymers. In an additional aspect, the present invention relates to a method for repairing tissue, for example, cranioskeletal or maxillary bone defects, comprising transducing the BMP-2 gene into bone marrow stromal cells which are harvested from a subject, combining the genetically engineered cells with at least one polymer, and implanting the combination at the site of the defect. The BMP-2 protein is advantageously produced as long as the transduced gene stays in the cells.